

## **AOSE ADVISORY COMMITTEE MEETING MINUTES**

On August 4, 2005, the AOSE Advisory Committee held their second meeting in the Fifth Floor Conference room of the Office of Environmental Health Services, 109 Governor Street, Richmond, Virginia 23219. The following committee members attended in person or via polycom:

- John Burleson, Virginia Department of Health, Central Shenandoah Health District; Charles “Chip” L. Dunn, Jr. P.E., AOSE;
- Phil Dunn, AOSE;
- Wayne Fenton, Well Driller;
- Andre Fontaine, P.E., Real Estate Agent;
- David Fridley, Virginia Department of Health, Three Rivers Health District
- Dan Horne, Virginia Department of Health, Virginia Beach Health District
- Stuart McKenzie, Environmental Planner, Northern Neck Planning Commission;
- Curtis H. Moore, AOSE, CPSS;
- Pam Pruett, AOSE;
- Neal Spiers, AOSE, CPSS;
- David Waldrep, Virginia Department of Health, Piedmont Health District;
- Ray Wilson, Contractor
- Frances Wright, Contractor
- Dwayne Roadcap, Facilitator, VDH-Division of Onsite Sewage & Water Services; and
- Allen Knapp, Co-Facilitator, VDH-Division of Onsite Sewage & Water Services.

The following committee member was not present:

- Ken Addison, Surveyor

Several non-committee members attended in person or via polycom:

VDH employees: Jerry Franklin, Don Hackler, Jack McClelland, Vic Marcussen, Beth Manghi, Carol Lien, J. Macdonald, Allen Gutshall, and Diane Helentjaris. Larry Hall, Well Driller, and Rachael Harrell with the Department of Planning and Budget also attended.

Central Shenandoah, New River, Fairfax, Loudoun, Eastern Shore, Thomas Jefferson, and Virginia Beach health districts participated in this meeting.

Handouts for the meeting included the following:

1. Discussion paper on VDH’s requirement for AOSEs to stamp, date, and sign work;
2. Meeting agenda;
3. Future Discussion Topics (updated 8/4/05);

**Committee Purpose:** The Advisory Committee makes recommendations to the Commissioner of Health on policy, procedures, and regulations for the Authorized Onsite Soil Evaluator (AOSE) program. The committee's discussion and recommendations are only limited by what the Committee wishes to address. Committee members and stakeholders may attend meetings via remote locations through the health department's polycom system.

**Committee Decisions:** The committee reaches all decisions using a "full-consensus" mechanism, meaning that all members in attendance must agree before a recommendation is sent to the Commissioner. Members who do not attend a meeting are expected to support their fellow members on decisions reached in their absence.

**Ground rules:**

1. Respect all views and welcome new ideas.
2. Participate, be candid, and avoid personal attacks.
3. Be respectful when you have the floor. Keep comments pithy and concise. Limit speaking time to assure that all members have an opportunity to be heard.
4. Listen for new understandings and offer new perspectives.
5. Focus on agenda and topic. Assist facilitator and chairperson in keeping the discussion focused and on topic.
6. Avoid "side bar" conversations and hidden criticism.

The Committee will seek non-committee input on an as-needed basis. The facilitator or chair person may recognize a non-member. Depending on the flow of discussion and the topic, the chair person could allow non-committee participants to interject without being recognized on a case-by-case basis.

David Fridley, David Waldrep, Curtis Moore, Phil Dunn, Pam Pruitt, Neal Spiers, and Frances Wright agreed to act as chair persons for the Committee on a rotating schedule. Frances Wright plans to act as chair for the AOSE Advisory Committee meeting scheduled for September 27, 9:00 AM until 1:00 PM, 5<sup>th</sup> Floor conference Room, 109 Governor Street, Richmond Virginia. As chair persons rotate, they will work with the facilitator to assure that future meetings flow together.

**Committee Discussion and Recommendations:**

Discussion of Item #1, Paperwork Issues, "Future Discussion Topics, 8/4/05"

The committee discussed whether AOSEs should be required to stamp and sign every page of their work as outlined in the AOSE Implementation Manual, GMP #126. See Attachment #1 for more information. Some members expressed frustration at the extent of discussion on this topic. They felt that the Committee had much larger issues to address, such as what were the appropriate roles of VDH staff and private sector AOSEs in the program. Most agreed that the seal, signature, and date meant that the AOSE was accepting full responsibility for the work. The seal assured that the AOSE's work was complete, authorized, and under the AOSE's

complete purview. It did not matter that every page was sealed, dated, and stamped as long as there was recognition that a seal meant that the entire design package was certified. Some members disagreed with Roadcap's understanding from a conversation he had had with Mark Courtney, Executive Director for the APELSCIDLA Board. They felt that the Department of Professional and Occupational Regulation (DPOR) did not require its regulants to sign, seal, and date every page. They believed that only the plans, specifications, and plats required an original seal. They suggested that VDH simply follow how engineers, surveyors, and architects handled their work on a practical level.

After discussing this topic for about two hours, the Committee developed the following recommendation for the Commissioner's consideration:

*The AOSE Advisory Committee recommends that the Commissioner of Health change the AOSE implementation manual, which currently requires AOSEs to stamp, sign, and seal every page. Specifically, the Committee recommends the following change:*

*Whenever an AOSE is required to certify work in accordance with the AOSE Regulations and/or the AOSE implementation manual, the AOSE must sign, date, and stamp the cover page and the page on which the certification statement is located, which may be located on the cover page. The AOSE must place a stamp on all original construction drawings and site sketches. The stamp (or seal) shall conform in detail and size to the design illustrated in 18 VAC 10-20-760.B.6 of the APELSCIDLA Regulations. The AOSE does not need to stamp, sign, or date soil reports, "cut-sheets", or other pages not listed above. Copies that are made from the "master document" do not need an original signature, stamp, or date. The health department's application for a certification letter or construction permit will not be a part of the AOSE's design package.*

*An electronic seal, signature, and date is permitted in lieu of an original seal, signature, and date when it is a unique identification of the professional, is verifiable, is under the professional's direct and sole control, is linked to the document's file in such a manner that changes are readily determined and visually displayed, and changes to the document after affixing the electronic seal would remove the seal. See 18 VAC 10-20-760.*

*The Cover Page shall be identified as Page 1 of X, and shall at a minimum contain a list of the documents contained in the design package, identify the property and property owner, date, and, revision dates. To assure that contractors have the correct set of plans, the health department's approval letter must correspond to the date on the Cover Page or the date of last revision on the Cover Page, if revisions are made.*

Neal Spiers agreed to draft a model cover page for the Committee's review at the next scheduled meeting (September 27, 2005). The Committee will revisit this issue at the September 27, 2005 meeting to assure that the recommendation accurately reflects the Committee's wishes before presentation to the Commissioner.

The Committee elected to defer additional conversation on the subject of health department inconsistency. See 7/15/05 meeting minutes for more information.

Discussion of Item #2, Process Issues, "Future Discussion Topics, 8/4/05"

The committee discussed whether VDH should require AOSE work on previously approved sites or lots. Some VDH staff indicated that they liked the ability to send owners to the private sector when they wanted any change to a prior approval. These staff indicated that once VDH had determined (approved) that a drainfield and/or well could be placed on a lot, then the public health issues were resolved. Any changes to the approval for a drainfield or well were simply a matter of convenience or preference for the owner. Since VDH's mission was to protect public health and groundwater supplies, it should use all available resources toward that goal and not spend its energy having to repeatedly deal with owner preferences on the same approval.

One committee member thought that it was unfair for VDH to force customers to a more expensive private sector AOSE if VDH had performed the original work. Another person noted that the backlogs in the private sector were equal to or greater than VDH's backlogs. While the *Code of Virginia* required VDH to hire AOSEs when backlogs exceeded 15 working days for construction permits, this person felt the law was an unfunded mandate and customers would still have a significant wait from the private sector even if VDH could afford to hire AOSEs.

One member stated that he did not need additional work from VDH because he could not keep up with the incoming work not supplied by VDH as it was. He preferred that VDH not send more work his way because of the backlog in the private sector. Others suggested that supply in the private sector would eventually catch up with the demand, or perhaps the real estate market would cool. Under such a scenario, then private sector AOSEs might be unhappy that VDH (with subsidized costs) would be competing and taking away work from the private sector.

Some members noted that they were seeing "sloppy" VDH denials because VDH wanted to send clients to the private sector. If VDH employees were faced with a difficult site/lot, then the committee member thought that VDH staff were likely to perform a quick and perfunctory review, state that it looked like secondary treatment was needed, and send the customer to the private sector. Because a lengthy site and soil evaluation was necessary in some cases and VDH had limited time to process applications (15 days), some thought VDH was making quick decisions to deny the lot. As a result, the most difficult lots and repairs were being sent to the private sector without adequate site and soil evaluations by VDH. Others suggested that VDH should be completely out of providing site and soil evaluation services for those very same reasons. VDH staff were not allowed to design treatment systems and had insufficient resources to adequately process applications for difficult sites. Hence, VDH could not adequately provide consultation to owners on the different treatment devices, their associated costs, and all of the options available. VDH staff were focused on septic tank effluent (primitive) systems and the market was demanding greater and more detailed service best left to the private sector.

Many suggested that the Committee was dealing with a fundamental question: "what was the appropriate role for VDH and private sector AOSEs." The Committee felt that it would be well

served to understand the health department's long-term vision for the program and how VDH management viewed the proper roles and responsibilities of its staff as the market needs of the consumer were shifting. Some noted that VDH had no direct control of its destiny because VDH programs and philosophy shifted depending on legislative input. As administrations and legislators changed, so did the philosophy dictated to the agency.

Roadcap noted that VDH had recently published a Request for Proposal (RFP) seeking an outside consultant to review its business model and offer recommendations for change. He felt that the committee would be involved in this process and that the consultant might survey stakeholders on the committee, or perhaps attend a meeting or two. The Committee asked Roadcap to discuss how VDH management saw the future of the AOSE program at the next meeting to help the Committee work within the framework envisioned by VDH management.

After additional discussion, the committee tried to find consensus. Regardless of the Commissioner's ability to implement such a change, the Committee brainstormed the following options:

1. If a site is approved based on AOSE work, any future changes requiring a new approval, then the Health Department should require that the application be supported with AOSE/PE work before issuing a new approval. (broader in scope)
2. Limit the health department's processing of construction permit applications to one bare application per lot. For future construction applications that required a new site visit, then the health department should have the option of requiring the applicant to submit supporting AOSE/PE work for the change. (more narrow in scope)

Regardless of the option chosen (the more narrow or broader approach), the Committee felt gradual implementation was necessary to assure that the supply of resources in the private sector could meet the demand. *The Committee felt that more discussion of this topic area was necessary; but in the meantime, they were willing to recommend to the Commissioner that if possible, he allow local health departments the option of processing one bare application per lot. For future applications that required a site and soil evaluation, then the health departments should be allowed to require supporting AOSE/PE work.* One member suggested that perhaps the health department could redefine its definition of the word "backlog" such that sites previously approved were not counted in the backlog.

#### Discussion of Item #3, Process Issues, "Future Discussion Topics, 8/4/05"

The committee discussed how VDH and the private sector AOSEs could better coordinate and process requests for records. One person noted that he did not have time to visit local health departments to research records and that it took too long to receive information back from the health department on neighboring lots. Under FOIA (Freedom of Information Act), health departments were required to respond to the request within five business days but he did not believe that some health departments were timely processing the requests. Most other AOSEs noted that they or a member of their company personally reviewed health department records

because they wanted to perform their due diligence and not rely on administrative staff to catch important items in the file. In some cases, the private sector completed a simple form to identify the records to be located and then scheduled a time to review the files. Other times, people were able to call the health department to schedule a review time without completing any paperwork. Most of the members felt that that VDH staff and the private sector were coordinating file reviews in a timely manner. Nevertheless, members thought that it would be helpful to have a standard FOIA form to help provide more consistency. Pam Pruett volunteered to offer a standard FOIA form (Form DD of the AOSE implementation manual) for the Committee's consideration.

Discussion of Item #4, Process Issues, "Future Discussion Topics, 8/4/05"

The Committee discussed whether deemed approval should apply to proprietary, pre-engineered systems or to systems designed by a professional engineer using a certification letter. One member suggested that local health departments were taking significant time to process AOSE/PE proposals for systems designed in accordance with VDH policies because they were considered proprietary, pre-engineered. However, by simply designing the system differently and outside the guidelines of the policy, then deemed approval applied and VDH was processing those more quickly. Such a process seemed to punish those with specific approval by policy simply because they were considered proprietary, pre-engineered. Others thought it was unfair for VDH to hold up customers who had paid significant money for AOSE/PE work and consultation to process bare applications (applications that did not have supporting AOSE/PE work). This person thought that VDH should prioritize its work to encourage supporting AOSE/PE work with applications.

The Committee generally thought that proprietary, pre-engineered systems that had "experimental" approval should not qualify for deemed approval. However, for proprietary, pre-engineered systems that had general or provisional approval, that perhaps deemed approval should apply (see §§ 120 and 441-444 of the *Sewage Handling and Disposal Regulations* for more information). Allen Knapp volunteered to provide the committee with code sections on the subject of deemed approval.

The Committee did not have time to fully develop this topic so it asked that the following questions be addressed at the next meeting:

1. Where is the list of approved proprietary, pre-engineered systems?
2. Can VDH treat proprietary, pre-engineered systems the same as other systems (i.e. apply deemed approval)?
3. What is the definition of a proprietary, pre-engineered system?

**Next meeting:** September 27, 2005, 9:00 AM to 1:00 PM, Office of Environmental Health Services Conference Room, 5<sup>th</sup> Floor, Richmond, Virginia 23219. Remote sites currently provided at the following health districts: Piedmont, New River, Fairfax, Eastern Shore, Virginia Beach, Thomas Jefferson, Rappahanock/Rapidan, Loudoun, and Mount Rogers. Other remote sites available upon request to Donna Tiller at (804) 864-7470.

**AOSE ADVISORY COMMITTEE  
DRAFT AGENDA  
AUGUST 4, 2005 MEETING**

**I. Old Business**

- A. Review and accept edits for the 7/12/05 meeting minutes. Approve minutes.**
- B. Discuss rotating chairperson for the Advisory Committee. Frances Wright is willing to act as first chairperson in a rotating schedule.**
- C. Discuss whether committee wants to make a recommendation to the Commissioner regarding AOSE stamp and seal on work product. See attachment #1 for information learned on this issue since the last meeting.**
- D. Determine whether the committee would like to continue its work from the last meeting on discussing inconsistency issues in the AOSE program. If so, determine what recommendation(s) might be made in this topic area.**

**II. New Business**

- A. Review document entitled "Future Discussion Topics". Determine whether and how the committee would like to use this document. See Attachment #2 with new topics added from (Part B) below.**
- B. Review new committee member ideas for discussion, which have been added to the "Future Discussion Topics" paper. The topic ideas are listed below in the form of a question:**
  - 1. Should VDH require its staff (especially AOSEs) to produce the same paperwork that is expected of AOSEs working in the private sector (i.e., scaled drawings, stamp & seal every page, page numbering, etc.)?**
  - 2. How can VDH assure equal treatment in the review of AOSE work from varying districts and counties? Currently, AOSE work and their package designs must meet different standards in varying counties and health districts.**
  - 3. Should VDH perform site evaluations and be in the design business? Should VDH focus its resources on plan review, being a record keeper, developing reports on system function, O&M, QA/QC, and perhaps do site evaluations "as means of last resort"?**
  - 4. Should a "standards of good practice" document be created for AOSE work? This document would not have to be binding but would offer guidance to AOSEs and set the "standard" for what should be done.**
  - 5. Should VDH discuss waivers from secondary effluent or pressure dosing with owners who submit repair applications with supporting AOSE/PE work? VDH staff do not generally interfere in the design consultation between client and AOSE, but VDH staff do not know whether the AOSE discussed the option for a waiver with the client, or for that matter, the myriad other design options available when treatment and pressure dosing are used.**
- C. Determine order of topic discussion. Discuss issues as desired by committee members and offer recommendations to the Commissioner if possible.**

**Attachment #1: 8/04/05 AOSE Advisory Committee  
Requirement to Date, Stamp, and Sign Every Page**

**Questions:**

1. Should VDH change its policy that requires an AOSE to stamp, sign, and date every page of a design package? If so, how?
2. Should VDH follow the Department of Professional and Occupational Regulation's (DPOR) lead and emulate its requirements, including the size and look of the seal?

**Options:**

1. Keep VDH's policy as it is currently written with no changes.
2. Change VDH's policy to fully conform to DPOR's requirements.
3. Develop a unique requirement that is different from DPOR's regulations and current VDH requirements.

**Discussion:**

At the 7/12/05 AOSE Advisory Committee, VDH staff stated that the requirement to have AOSEs stamp, sign, and date every page of their submission was developed from the Department of Professional and Occupational's Regulation (DPOR) for other licensed professionals (i.e., surveyors and professional engineers). Because the AOSE certification was essentially becoming a licensing program on January 1, 2006 when VDH would only accept work from AOSE/PEs, then VDH wanted to keep one requirement and one expectation for all professions. One requirement would assure consistency among the varying professional groups regulated by DPOR or VDH. Some committee members thought that DPOR did not require regulants to sign, stamp, and date every page.

DPOR's regulations state the following:

***18 VAC 10-20-760. Use of seal.***

*A. The application of a professional seal shall indicate that the professional has exercised complete direction and control over the work to which it is affixed. Therefore, no regulant shall affix a name, seal or certification to a plat, design, specification or other work constituting the practice of the professions regulated which has been prepared by an unlicensed or uncertified person or firm unless such work was performed under the direction and supervision of the regulant while under the regulant's contract or while employed by the same firm as the regulant. If a regulant is unable to seal completed professional work, such work may be sealed by another regulant only after thorough review and verification of the work has been accomplished to the same extent that would have been exercised if the work had been done under the complete direction and control of the regulant affixing the professional seal.*

*B. A regulant shall apply a stamp or a preprinted or electronic seal to final and complete original cover sheets of plans, drawings, plats, technical reports and specifications and to each original sheet of plans, drawings or plats, prepared by the regulant or someone under his direct control and personal supervision.*

*1. All seal imprints on the cover or first sheet of final documents shall bear an original signature and date. "Final Documents" are completed documents or copies submitted on a client's behalf for approval by authorities or*



*recording. In such cases, the cover sheet of the documents or copies shall contain a list of drawings included in the set on which a seal, original signature and date shall be affixed for all regulated disciplines. Every page of the submission, other than the cover, may be reproduced from originals which contain the seal, original signature and date by each discipline responsible for the work.*

*a. An electronic seal, signature and date is permitted to be used in lieu of an original seal, signature and date when the following criteria, and all other requirements of this section, are met:*

- 1. It is a unique identification of the professional;*
- 2. It is verifiable;*
- 3. It is under the professional's direct and sole control;*
- 4. It is linked to the document file in such a manner that changes are readily determined and visually displayed if any data contained in the document file was changed subsequent to the electronic seal, signature and date having been affixed to the document; and*
- 5. Changes to the document after affixing the electronic seal, signature and date shall cause the electronic seal, signature and date to be removed or altered in such a way as to invalidate the electronic seal, signature and date.*

*b. In addition, once the electronic seal, signature and date is applied to the document, the document shall be in a view-only format if the document is to be electronically transmitted.*

*2. Incomplete plans, documents and sketches, whether advance or preliminary copies, shall be so identified on the plan, document or sketch and need not be sealed, signed or dated.*

*3. All plans, drawings or plats prepared by the regulant shall bear the regulant's name or firm name, address and project name.*

*4. The seal of each regulant responsible for each profession shall be used and shall be on each document that was prepared under the regulant's direction and for which that professional is responsible. If one of the exemptions found in § 54.1- 402 of the Code of Virginia is applicable, a professional licensed or certified by this board shall nevertheless apply his seal to the exempt work.*

*5. Application of the seal and signature indicates acceptance of responsibility for work shown thereon.*

*6. The seal shall conform in detail and size to the design illustrated below and shall be two inches in diameter. The designs below may not be shown to scale: The number referred to is the last six-digit number as shown on the license or certificate. The number is permanent. Leading zeros contained in the six-digit number may be omitted from the seal.*

VDH's current implementation policy states the following:

*All evaluation reports and designs submitted to VDH, whether by an AOSE/PE or by any other person, must be in the form specified in this policy and contain the minimum information required, and shall be certified as substantially complying with the minimum requirements of the Sewage Handling and Disposal Regulations (12 VAC 5-610-20 et seq., the "Regulations"). (See AOSE Regulations, section 70). **Whenever an AOSE is required to sign or certify work according to the AOSE Regulations and/or this policy he must, in addition to his signature, apply a stamp or a preprinted or electronic seal bearing the AOSE's name and certification number to original cover sheets of plans, drawings, plats, reports, and specifications and to each original sheet of plans, drawings, plats, reports, and specifications prepared by the AOSE or someone under his direct control and supervision.** Application of the seal and signature indicates acceptance of responsibility for work shown thereon.*

Dwayne Roadcap, facilitator for the committee, contacted Mark Courtney, Executive Director for the APELSCIDLA Board, which oversees the disciplinary actions and the

regulations for the APELSCIDLA Regulations.<sup>1</sup> Mr. Courtney stated that the APELSCIDLA Board expects its regulants to stamp, sign, and date each and every page for the “master” document. For copies generated from the master document, the regulant is expected to develop a cover page and put an original seal, date, and signature on the cover document, which would list the associated attachments. In other words, if the original plan had 200 pages and 200 copies were necessary, then to comply with 18 VAC 10-20-760, the regulant would have to place an original stamp, signature, and seal on each page of the 200-page document and then make 200 cover pages and put an original stamp, signature, and seal on 200 cover pages with a listing of the copied contents from the master document. Courtney stated that a regulant would not have to put a stamp on a “cut-sheet” unless notes or additions were made to the cut-sheet for the specific project. However, the APELSCIDLA Board expected regulants to err on the side of caution and stamp cut-sheets when in doubt.

From Roadcap’s discussion with Courtney, it appears that VDH’s policy is consistent with the APELSCIDLA Board’s expectations of its regulants to stamp, sign, and date every page of the master document. VDH’s policy appears to be inconsistent because it does not require a cover page with an original stamp, signature, and date for all copies generated from the master document. The APELSCIDLA Board does not review work from its regulants as VDH does. Hence, the APELSCIDLA Board would not know whether its regulants were following the requirements of 18 VAC 10-20-760 unless persons brought forth complaints about its regulants not following the correct procedure outlined in § 760 of the APELSCIDLA Regulations. VDH, on the other hand, reviews the work of its regulants and can see whether paperwork is in its correct format.

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<sup>1</sup> APELSCIDLA means the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, and Landscape Architects. Visit [http://www.state.va.us/dpor/ape\\_main.htm](http://www.state.va.us/dpor/ape_main.htm) for more information.

Attachment #2 for 8/4/05 Meeting  
Future Discussion Topics  
AOSE Advisory Committee

Process Issues

1. Why are different health districts implementing the AOSE policy and regulations differently?<sup>2</sup>
2. Can VDH require AOSE work on sites previously approved where the owner wants to change things (ie. Changes in house location, well location, number of bedrooms, etc.)?
3. To what extent should VDH help AOSE/PEs research files for proposed drainfields and wells on neighboring properties? How can this need be better coordinated?
4. Can deemed approval apply to proprietary, pre-engineered systems without a change to the law?
5. Can VDH apply "deemed approval" to all AOSE/PE work or work that a PE uses with a VDH certification letter to help speed up the process for owners?
6. Should VDH and AOSE/PEs be required to field stake their proposed well and drainfield locations?
7. Can VDH provide more consistency as to when it requires formal plans from a PE on alternative systems?
8. Should VDH perform site evaluations and be in the design business? Should VDH focus its resources on plan review, being a record keeper, developing reports on system function, O&M, QA/QC, and perhaps do site evaluations "as means of last resort"?
9. Should VDH discuss waivers from secondary effluent or pressure dosing with owners who submit repair applications with supporting AOSE/PE work? VDH staff do not generally interfere in the design consultation between client and AOSE, but VDH staff do not know whether the AOSE discussed the option for a waiver with the client, or for that matter, the myriad other design options available when treatment and pressure dosing are used.

Paperwork Issues

1. Does AOSE have to stamp every page?<sup>3</sup>
2. What is the minimum quality of work expected? (handwritten vs. type, to-scale drawing, showing only the "good" borings, field staking the footprint, field staking the well area, etc.)
3. How can we develop standardized forms as listed in the implementation manual?
4. How can VDH improve its letters of approval to assure that contractors know the exact location of the property and where to install the system? Health departments use different dates for their letters of approval and it is confusing when compared to the AOSE package, which often has different dates. Sometimes there are multiple letters of approval for different sized houses.
5. Should VDH require its staff (especially AOSEs) to produce the same paperwork that is expected of AOSEs working in the private sector (i.e., scaled drawings, stamp & seal every page, page numbering, etc.)?

Installer Issues

1. How can installers (well drillers and septic contractors) better coordinate inspections with the private sector?
2. How does the installer know that the permit it receives from the owner/AOSE is the correct permit?
3. How can stakeholders limit garages, sheds, outbuildings, swimming pools, etc. from encroaching into the proposed footprint before a system is installed?
4. How can stakeholders better communicate when a permit change is needed and the contractor is on-site to do the work?

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<sup>2</sup> Discussed at 7/12/05 meeting. No recommendation reached.

<sup>3</sup> Discussed at 7/12/05 meeting. No recommendation reached.

5. Can VDH or AOSEs inform the installers at the time of inspection whether the system's construction passes? Often, people leave without giving an answer and the installer is left there with people and equipment.

#### Inspection Issues

1. Why is an "as-built" drawing needed if the system is installed just as shown on the construction permit?
2. Should AOSEs fill out a different inspection form? Currently, they do not need to list the exact components installed.
3. How can VDH assure equal treatment in the review of AOSE work from varying districts and counties? Currently, AOSE work and their package designs must meet different standards in varying counties and health districts.

#### Rule/Policy/Reg Issues

1. What is the practice of engineering? Can AOSE design duplex or small commercial facilities?
2. How can fees charged be changed or addressed? (Local vs. state)
3. How to get consistency across health district lines?
4. How can customers be better informed of the AOSE/PE requirements for alternative systems? Often, contractors are left holding the bag to explain system components and O&M.
5. Should VDH be more involved with O&M agreements for alternative systems?

#### Training & Testing Issues

1. What are the training needs for AOSE/PEs and VDH employees?
2. Can VDH begin to offer more training courses for alternative systems, inspections, etc?
3. Can VDH create an AOSE-in-Training category for those areas of the states where there are too few AOSEs and pricing for the work is high? In Southwest VA, there are too few AOSEs for the work needed. Surveyors might be able to take some classwork for the soil training to enter such a category.
4. Should a suggested minimum standards of "good" practice document be created for AOSE work? This document would not have to be binding but would offer guidance to AOSEs and set the "standard" for what should be done.

#### Enforcement Issues

1. When should VDH take enforcement action against an AOSE?
2. What should the penalties be for submitting poor work to the health department?
3. How can VDH take quicker action when a problem is encountered with bad private sector work?